

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**UTILITY
PATENT APPLICATION
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. Y0165-002

First Inventor Pan, Janet L.

Title Use of Deep-level Transitions Semiconductor Device

Express Mail Label No. EV 265498245 US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. Fee Transmittal Form (e.g., PTO/SB/17)
(Submit an original and a duplicate for fee processing)

2. Applicant claims small entity status.
See 37 CFR 1.27.

3. Specification [Total Pages 75]
(preferred arrangement set forth below)

- Descriptive title of the invention
- Cross Reference to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to sequence listing, a table, or a computer program listing appendix
- Background of the Invention
- Brief Summary of the Invention
- Brief Description of the Drawings (if filed)
- Detailed Description
- Claim(s)
- Abstract of the Disclosure

4. Drawing(s) (35 U.S.C. 113) [Total Sheets 16]

5. Oath or Declaration [Total Pages 2]

- a. Newly executed (original or copy)
- b. Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed)
 - i. **DELETION OF INVENTOR(S)**
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).

6. Application Data Sheet. See 37 CFR 1.76

ADDRESS TO: Assistant Commissioner for Patents
Box Patent Application
Washington, DC 20231

7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)

8. Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)

- a. Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
 - i. CD-ROM or CD-R (2 copies); or
 - ii. paper
- c. Statements verifying identity of above copies

22264 U.S. PTO
10/654790
09/04/03**ACCOMPANYING APPLICATION PARTS**

9. Assignment Papers (cover sheet & document(s))

10. 37 CFR 3.73(b) Statement Power of Attorney
(when there is an assignee) Attorney

11. English Translation Document (if applicable)

12. Information Disclosure Statement (IDS)/PTO-1449 Copies of IDS Citations

13. Preliminary Amendment

14. Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)

15. Certified Copy of Priority Document(s)
(if foreign priority is claimed)

16. Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.

17. Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation Divisional Continuation-in-part (CIP) of prior application No.: _____ / _____

Prior application information: Examiner: _____ Group Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS
 Customer Number or Bar Code Label or Correspondence address below

(Insert Customer No. or Attach bar code label here)

Name	Patterson, Belknap, Webb & Tyler LLP				
Address	ATTN: IP Docketing 1133 Avenue of the Americas				
City	New York	State	NY	Zip Code	10036
Country	USA	Telephone	212-336-2000	Fax	212-336-2222

Name (Print/Type)	David Garrod	Registration No. (Attorney/Agent)	35,149
Signature			Date 09/04/2003

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Pan, Janet L.
Serial No.: N/A
Filing Date: Filed Herewith
Title: Use of Deep-Level Transitions in Semiconductor Devices

Mailstop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 2313-1450

EXPRESS MAIL CERTIFICATE

Express Mail Label No.: EV 265498245 US Date of Deposit: September 4, 2003

I hereby certify that the following documents:

1. Utility Patent Application Transmittal Form (1 page);
2. Fee Transmittal Form (1 original, 1 copy, 2 pages);
3. Declaration (2 pages);
4. Preliminary Amendment (42 pages);
5. Patent Application Specification (75 pages);
6. Figures 1-16 (16 pages);
7. Check #: 130492 in the amount of \$375.00; and,
8. Return postcard,

are being deposited with the United States Postal Service "Express Mail Post Office To Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to, Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Respectfully Submitted,


Al Charnec

Mailing Address:
PATTERSON, BELKNAP, WEBB & TYLER LLP
1133 Avenue of the Americas
New York, NY 10036-6710
Telephone: (212) 336-2000
Facsimile: (212) 336-2222

FEE TRANSMITTAL

for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT **(\$)** **375.00**

METHOD OF PAYMENT (check all that apply)

Check Credit card Money Order Other None
 Deposit Account:

Deposit Account Number
16-0633

The Commissioner is authorized to: (check all that apply)
 Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) during the pendency of this application
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION**1. BASIC FILING FEE**

Large Entity	Fee Code (\$)	Fee	Small Entity	Fee Code (\$)	Fee	Fee Description	Fee Paid
1001	750	2001	375			Utility filing fee	\$375.00
1002	330	2002	165			Design filing fee	
1003	520	2003	260			Plant filing fee	
1004	750	2004	375			Reissue filing fee	
1005	160	2005	80			Provisional filing fee	
SUBTOTAL (1)		(\$)					

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	20	Extra Claims from below	Fee Paid
Independent Claims	3	-20** = <input type="text"/> X <input type="text"/> = <input type="text"/>	
Multiple Dependent		-3** = <input type="text"/> X <input type="text"/> = <input type="text"/>	

Large Entity	Fee Code (\$)	Fee	Small Entity	Fee Code (\$)	Fee	Fee Description	Fee Paid
1202	18	2202	9			Claims in excess of 20	
1201	84	2201	42			Independent claims in excess of 3	
1203	280	2203	140			Multiple dependent claim, if not paid	
1204	84	2204	42			** Reissue independent claims over original patent	
1205	18	2205	9			** Reissue claims in excess of 20 and over original patent	
SUBTOTAL (2)		(\$) 375.00					

**or number previously paid, if greater; For Reissues, see above

Complete if Known	
Application Number	N/A
Filing Date	Filed Herewith
First Named Inventor	Pan, Janet L.
Examiner Name	N/A
Art Unit	N/A
Attorney Docket No.	Y0165-002

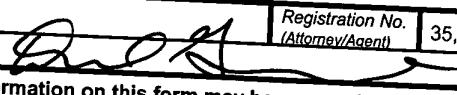
FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Large Entity	Fee Code (\$)	Fee	Small Entity	Fee Code (\$)	Fee	Fee Description	Fee Paid
1051	130	2051	65			Surcharge - late filing fee or oath	
1052	50	2052	25			Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130			Non-English specification	
1812	2,520	1812	2,520			For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*			Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*			Requesting publication of SIR after Examiner action	
1251	110	2251	55			Extension for reply within first month	
1252	410	2252	205			Extension for reply within second month	
1253	930	2253	465			Extension for reply within third month	
1254	1,450	2254	725			Extension for reply within fourth month	
1255	1,970	2255	985			Extension for reply within fifth month	
1401	320	2401	160			Notice of Appeal	
1402	320	2402	160			Filing a brief in support of an appeal	
1403	280	2403	140			Request for oral hearing	
1451	1,510	1451	1,510			Petition to institute a public use proceeding	
1452	110	2452	55			Petition to revive - unavoidable	
1453	1,300	2453	650			Petition to revive - unintentional	
1501	1,300	2501	650			Utility issue fee (or reissue)	
1502	470	2502	235			Design issue fee	
1503	630	2503	315			Plant issue fee	
1460	130	1460	130			Petitions to the Commissioner	
1807	50	1807	50			Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180			Submission of Information Disclosure Stmt	
8021	40	8021	40			Recording each patent assignment per property (times number of properties)	
1809	750	2809	375			Filing a submission after final rejection (37 CFR 1.129(a))	
1810	750	2810	375			For each additional invention to be examined (37 CFR 1.129(b))	
1801	750	2801	375			Request for Continued Examination (RCE)	
1802	900	1802	900			Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)

SUBMITTED BY		(Complete if applicable)	
Name (Print/Type)	David Garrod	Registration No. (Attorney/Agent)	35,149
Signature		Telephone	212-336-2183

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.